JOHN ASHCROFT
Governor

FREDERICK A. BRUNNER
Director

TO: 1. ~~MORBY~~
2. ~~SMITH~~
3. Barrett

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation, and Historic Preservation

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM

DATE: December 9, 1987

TO: John Young, Deputy Director, DEQ

FROM: P.P. Peter Price, Geologist, Engineering/Environmental Geology

SUBJECT: Report of seep on the west bank of the Spring River at Syntex-Verona Plant

As I was reviewing our files on the Syntex-Verona site, I came across a report by one of our geologists who walked the west bank of the Spring River, adjacent to the Syntex plant, and found a small seep. As you recall, a portion of the discussion at the November 16, 1987 meeting centered around monitoring of the trench area. It was mentioned that any recharge at the trench area was likely to discharge into the river, perhaps below water level, perhaps above as a seep or spring. Seeps or springs along the bank in the vicinity of the trench area may be appropriate monitoring points. However, it should be understood that such a seep or spring may receive its recharge from areas other than the trench. In other words, the existance of a seep or spring does not necessarily mean that it receives recharge from the trench area. A hydrologic connection between the two must be determined before the spring or seep can be relied upon as a monitoring point.

It is my opinion that Syntex should investigate this seep as a possible monitoring point for the trench area. Establishing a hydrologic connection, if it exists, may be difficult to unsuccessful, but may prove fruitful. In any event, the use of suction lysimeters, as proposed by Syntex at the November 16th meeting, should not be abandoned as another means of monitoring beneath the trenches.

I have attached a copy of the report mentioned above, dated September 2, 1983, to this memo. I will also send a copy to Gary Pendergrass at Syntex Agribusiness for his information.

cc: David Wagoner
Waste Management
EPA, Region VII

Syntex - Verona
MOD007452154
17.9 - MDNR
Correspondence
12-9-87

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FOR FILE ONLY

ADDENDUM TO SYNTEX REPORT, VERONA PLANT

LAWRENCE COUNTY, MISSOURI

On 8/31/83, Jon Kraft and myself walked the west bank of the Spring River from where the road to the trenches fords the river, downstream approximately 3000 feet to the mouth of a small intermittent tributary that enters Spring River from the west. The purpose of the trip was to look for any springs or seeps that could discharge water that has moved through the trenches on the hillside above. On the downstream trip, we walked along the prominant rock outcrops along the hillside. No areas of water discharge, or evidence that discharges take place during wet weather were noted. The rock was weathered to varying degrees and weathering along jointing patterns was prominant in places but no evidence of water movement was observed.

On the walk back upstream, the base of the hillslope and the bank of the river were followed. A rock face near the base of the bluff approximately 400 feet downstream of the river ford was wet, representing a small seep. The water emerging from the seep was insufficient to accumulate into any observable flow. The quantity of water in the seep is very small and probably represents very localized recharge, but would be worthwhile to keep in mind during any future sampling in the vicinity nonetheless. No other springs or seeps were observed.

Donald H. Meier, Geologist
Engineering Geology Section
Geology & Land Survey
September 2, 1983

JOHN ASHCROFT
Governor

FREDERICK A. BRUNNER
Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGY & LAND SURVEY
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Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation,
and Historic Preservation

December 9, 1987

Mr. Gary Pendergrass
Syntex Agribusiness, Inc.
P.O. Box 1246 S.S.S.
Springfield, MO 65805

Dear Gary:

In reviewing our files on the Syntex-Verona plant site, I came across a report, dated September 2, 1983, that mentions a seep along the west bank of the Spring River near the trench area. I have enclosed a copy of that report for your information. As we discussed at the November 16, 1987, meeting, such a seep or spring may receive some of its recharge from the trench area considering it's close proximity and may be a good monitoring point. As you and I know, however, the seep's usefulness as a monitoring point depends on many factors, verification of hydrologic connection, seasonal discharge characteristics, recharge area, etc. I feel that this seep, if it can be relocated, deserves some further investigation to determine if the factors mentioned above make it a valid monitoring point for the trench area. I realize that some of these factors may be difficult to unsuccessful to determine, but the effort may also prove fruitful.

If I can be of any other assistance to you, Gary, please let me know.

Sincerely,

DIVISION OF GEOLOGY AND LAND SURVEY

Peter Price, Geologist
Engineering/Environmental Geology

encl.
cc: John Young
Deputy Director, DEQ
cc: David Wagoner,
Waste Management
EPA, Region VII